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Millermatic® 350P

MIG Power Source, Wire Feeder and Gun Package

Quick Specs

Industrial Applications
Fabrication
Maintenance and Repair
Farm
Manufacturing
Industrial

Processes
MIG (GMAW)
Pulsed MIG (GMAW-P)
Flux-Cored (FCAW)

Rated Output
300 A at 32 VDC, 60% Duty Cycle, 60 Hz, 1- or 3-Phase Input Power

Amperage Range 25–400 A

Wire Feed Speed
50–700 IPM (1.3–18 m/min.) MIG Gun
50–800 IPM (1.3–20 m/min.) Spool Gun/Push-Pull Gun

Net Weight 181 lb. (82 kg)

Built-in Pulsed MIG programs
- .035 and .045 inch (0.9 and 1.2 mm) for mild or stainless steel.
- .035 and .047 inch (0.9 and 1.2 mm) for 4000 and 5000 series aluminum.
- .045 inch (1.2 mm) for metal core.

All programmed information is stored for MIG, push-pull and spool guns, and is restored after each power up.

Single- or three-phase input power with **line voltage compensation** for constant output even with fluctuations to the input power.

Aluminum Pulse Hot Start™ automatically provides more arc power to eliminate a "cold start" that is inherent with aluminum starts.

Superior aluminum performance. Direct connection for optional XR™ push-pull guns or Spoolmatic® spool gun. With **Gun-On-Demand™,** simply pull the trigger for the gun to be used and you're ready to weld.

***EXCLUSIVE!* Auto-Gun Detect™** automatically adjusts voltage, wire speed and timers for faster switching between MIG, push-pull and spool guns.

Fan-On-Demand™ cooling system only operates when needed, reducing power consumption and contaminants drawn into the machine.

Industrial four-roll wire drive system features two easy-to-set, scaled, tension adjustments and quick-change reversible drive rolls for .035- and .045-inch (0.9 and 1.2 mm) wire.

Welds materials 22 gauge up to 1/2-inch (12.7 mm) thick.

Comes complete with:
- 15-ft. (4.6 m) Bernard™ Q300 MIG gun with extra Centerfire™ contact tips
- 10-ft. (3 m) work cable with clamp
- 10-ft. (3 m) industrial power cord (without plug) for single- or three-phase
- Factory-installed gas solenoid
- Flow gauge regulator and gas hose for argon or AR/CO_2 mix
- Factory-installed, low-mounted running gear/ cylinder rack
- .035/.045-in. reversible V-groove drive rolls (order U-groove drive roll kits for aluminum welding)

Internal timers
- **Adjustable crater** feature optimizes crater size for steel, stainless, aluminum and metal-core applications.
- **Crater time delay** allows deactivation of crater feature for tack or small welds.

Special features
- Run-in adjustment for MIG, push-pull and spool guns.
- Built-in two-minute spot timer.
- Pre-flow and post-flow adjustment.
- View actual welding amperage/ voltage during welding, and five seconds after arc has shutoff.
- SharpArc™ controls welding arc cone width in Pulsed MIG welding mode.
- Inductance control customizes weld output characteristics in MIG welding mode.

TRUE BLUE® 3YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.
Gun warranted for 90 days, parts and labor.

Miller®

Miller Electric Mfg. Co.
An ITW Welding Company
1635 West Spencer Street
P.O. Box 1079
Appleton, WI 54912-1079 USA

Equipment Sales US and Canada
Phone: 866-931-9730
FAX: 800-637-2315
International Phone: 920-735-4554
International FAX: 920-735-4125

MillerWelds.com

ISO 9001 REGISTERED QUALITY SYSTEM

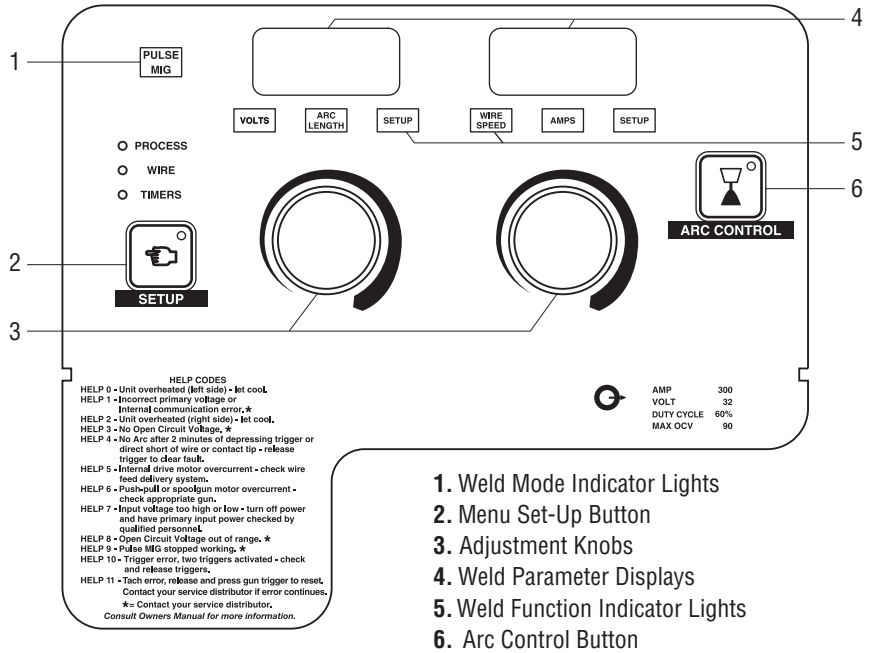
Specifications (Subject to change without notice.)

CV DC 3 Phase 1 Phase

Input Power	Amperage Range	Rated Output	Amps Input at Rated Output, 60 Hz 200 V	230 V	460 V	KVA	KW	Wire Feed Speed	Wire Type and Diameter	Dimensions	Net Weight
3-Phase	25–400 A	300 A at 32 VDC, 60% duty cycle	34	30	15	11.6	11.5	**MIG Gun** 50–700 IPM (1.3–18 m/min.) **Optional Spool Gun and Push-Pull Gun** 50–800 IPM (1.3–20 m/min.)	**Solid Steel** .023–.045 in. (0.6–1.2 mm) **Stainless** .030–.045 in. (0.8–1.2 mm) **Aluminum** .035–.047 in. (0.9–1.2 mm) **Flux-Cored** .030–.045 in. (0.8–1.2 mm) **Metal-Cored** .035–.052 in. (0.9–1.3 mm)	H: 34 in. (863 mm) W: 19 in. (483 mm) D: 41 in. (1041 mm)	181 lb. (82 kg)
1-Phase			69	61	30	13.1	11.2				

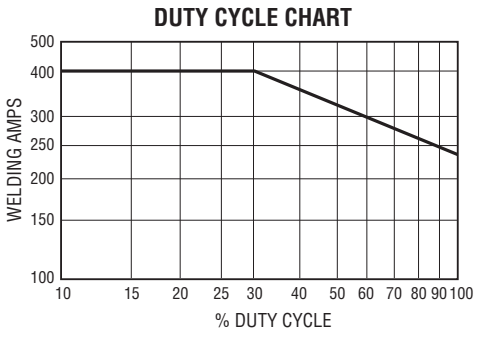
Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

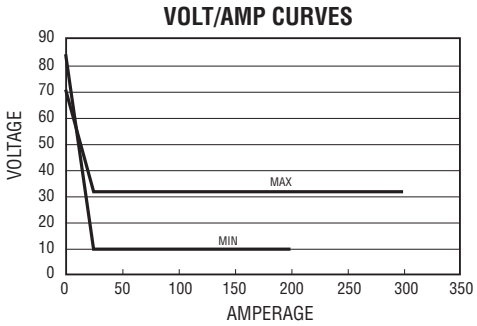
Control Panel


1
2
3
4
5
6
PULSE MIG
VOLTS
ARC LENGTH
SETUP
WIRE SPEED
AMPS
SETUP
PROCESS
WIRE
TIMERS
SETUP
ARC CONTROL
HELP CODES
HELP 0 - Unit overheated (left side) - let cool.
HELP 1 - Incorrect primary voltage or internal communication error. ★
HELP 2 - Unit overheated (right side) - let cool.
HELP 3 - No Open Circuit Voltage. ★
HELP 4 - No Arc after 2 minutes of depressing trigger or direct short of wire or contact tip - release trigger to clear fault.
HELP 5 - Internal drive motor overcurrent - check wire feed delivery system.
HELP 6 - Push-pull or spoolgun motor overcurrent - check appropriate gun.
HELP 7 - Input voltage too high or low - turn off power and have primary input power checked by qualified personnel.
HELP 8 - Open Circuit Voltage out of range. ★
HELP 9 - Pulse MIG stopped working. ★
HELP 10 - Trigger error, two triggers activated - check and release triggers.
HELP 11 - Tach error, release and press gun trigger to reset. Contact your service distributor if error continues.
★= Contact your service distributor.
Consult Owners Manual for more information.
AMP 300
VOLT 32
DUTY CYCLE 60%
MAX OCV 90

1. Weld Mode Indicator Lights
2. Menu Set-Up Button
3. Adjustment Knobs
4. Weld Parameter Displays
5. Weld Function Indicator Lights
6. Arc Control Button

Performance Data





Autobody Aluminum Repair System

Millermatic® 350P Autobody Aluminum Repair System
#907 300 002 200/230/460 V
The ideal autobody welding package for *aluminum* and steel repair.

Comes complete with:
- Millermatic 350P power source
- 12-ft. (3.7 m) Bernard™ Q200 aluminum MIG gun
- .047-in (1.2 mm) aluminum Centerfire™ contact tips (#T-047AL)
- .047-in (1.2 mm) U-groove drive rolls
- 8-in. (203 mm), 6-lb. (2.7 kg) spool of Hobart® .047-in (1.2 mm) 5554 aluminum wire

Genuine Miller® Accessories

**Order from Miller Service Parts.*

Guns

Bernard™ Q300 MIG Gun #229 560
15-foot (4.6 m) 300-amp gun handles .035–.045 inch (0.9–1.2 mm) standard wire. Includes Centerfire™ contact tips.

Bernard™ Q200 Aluminum MIG Gun — Contact Bernard Sales
12-foot (3.7 m) 200-amp gun with plastic liner and 30-degree head tube with phosphorous bronze head tube liner. Handles .047-inch (1.2 mm) aluminum wire. Includes #T-047AL Centerfire™ contact tips.

Spoolmatic® 15A Spool Gun #195 156
Spoolmatic® 30A Spool Gun #130 831
Ideal for aluminum welding jobs. Air-cooled 1-pound spool gun with 15-foot (4.6 m) or 30-foot (9.1 m) cable assembly. Rated at 200 amps at 100-percent duty cycle. For detailed information, see Spoolmatic literature, Index No. M/1.73.

XR-Aluma-Pro™ Lite Push-Pull Gun
#300 948 25 ft. (7.6 m)
Air-cooled gooseneck-style gun for .030–.047 inch (0.8–1.2 mm) aluminum. Rated at 175 amps at 60-percent duty cycle.

XR-Aluma-Pro™ Push-Pull Gun
#300 000 15 ft. (4.6 m)
#300 001 25 ft. (7.6 m)
#300 264 35 ft. (10.7 m)
Air-cooled gooseneck-style gun for .030–.047 inch (0.8–1.2 mm) aluminum. Rated at 200 amps at 100-percent duty cycle.

XR™-Pistol Push-Pull Gun
#198 127 15 ft. (4.6 m) cable
#198 128 30 ft. (9 m) cable
Air-cooled pistol grip gun for .030–.047 inch (0.8–1.2 mm) aluminum. Rated at 200 amps at 100-percent duty cycle.

U-Groove Aluminum Drive Roll and Accessory Kits for Push-Pull Guns
Note: XR-Aluma-Pro kits include Millermatic U-groove drive rolls, nylon wire guides and contact tips. XR-Pistol kits include Millermatic U-groove drive rolls, nylon wire guides, gun drive rolls and contact tips.

For XR-Aluma-Pro (air-cooled)
#195 311 .035 in. (0.9 mm)
#195 312 .040 in. (1 mm)
#195 313 .047 in. (1.2 mm)

For XR Pistol (air-cooled)
#195 201 .035 in. (0.9 mm)
#195 273 .040 in. (1 mm)
#195 202 .047 in. (1.2 mm)

Dual Cylinder Rack #195 299
Replaces single cylinder rack.

Millermatic® Protective Cover #195 142

CO_2 Regulator/Flow Gauge #212 492*
Required if using 100-percent CO_2 gas.

Power Cord Plug #213 380*
For 200- or 230-volt, single-phase application. Rated at 250 VAC/50 A NEMA-style 6-50P.

Consumables (Order from Miller Service Parts.)

For Bernard™ MIG Guns

Centerfire™ Contact Tips *(10 per package)*

#T-023 .023 in. (0.6 mm)
#T-030 .030 in. (0.8 mm)
#T-035 .035 in. (0.9 mm)
#T-039 .039 in. (1.0 mm) steel and for .035 in. (0.9 mm) aluminum or stainless wires or metal core
#T-045 .045 in. (1.2 mm)
#T-047AL .047 in. (1.2 mm) for aluminum wire only
#T-052 .052 in. (1.3 mm) steel and for .047 in. (1.2 mm) aluminum or stainless wires or metal core

Nozzle #N-5800C
Screw-type copper, 5/8-inch (15.9 mm) orifice flush

Nozzle Insulator Cap #10012

Diffuser #D-1
Large Centerfire gas diffuser

Replacement Jump Liners

#QJL-2330
.023–.030 in. (0.6–0.8 mm)

#QJL-3545 Standard
.035–.045 in. (0.9–1.2 mm)

#415-25
Phosphorous bronze liner for .047 in. (1.2 mm) aluminum wire

Replacement Liners

#43015
.023–.030 in. (0.6–0.8 mm)

#44115 Standard
.035–.045 in. (0.9–1.2 mm)

#415-45-03
Plastic liner for .047 in. (1.2 mm) aluminum wire

Millermatic® Drive Roll Kits

Note: Drive roll kits include four drive rolls, an intermediate guide, and an inlet guide.

V-Groove Drive Roll Kits
#087 132 .023/.025 in. (0.6 mm)
#046 780 .030 in. (0.8 mm)
#046 781 .035 in. (0.9 mm)
#046 782 .045 in. (1.2 mm)
#227 061 .035/.045 in. (0.9/1.2 mm)
#046 783 .052 in. (1.3 mm)
#046 784 1/16 in. (1.6 mm)

U-Groove Drive Roll Kits
#044 750 .035 in. (0.9 mm)
#046 785 .047 in. (1.2 mm)
#046 786 .052 in. (1.3 mm)
#046 787 1/16 in. (1.6 mm)

V-Knurled Drive Roll Kits
#046 792 .035 in. (0.9 mm)
#046 793 .045 in. (1.2 mm)
#046 794 .052 in. (1.3 mm)
#046 795 1/16 in. (1.6 mm)

Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
Millermatic® 350P	**#907 300**	200/230/460 V, MIG/Pulsed MIG unit		
Millermatic® 350P Autobody Aluminum Repair System	**#907 300 002**	200/230/460 V, MIG/Pulsed MIG unit for *aluminum* and steel repair. See page 2 for package contents		
Guns				
Bernard™ Q300 MIG Gun	**#229 560**	15 ft. (4.6 m), 300 A, .035–.045 in. (0.9–1.2 mm)		
Bernard™ Q200 Aluminum MIG Gun		Contact Bernard Sales		
Spoolmatic® 15A Spool Gun	**#195 156**	15 ft. (4.6 m), 200 A, .023–1/16 in. (0.6–1.6 mm) for aluminum		
Spoolmatic® 30A Spool Gun	**#130 831**	30 ft. (9 m), 200 A, .023–1/16 in. (0.6–1.6 mm) for aluminum		
XR-Aluma-Pro™ Lite Push-Pull Gun (air-cooled)	**#300 948**	25 ft. (7.6 m), 200 A, .030–1/16 in. (0.8–1.6 mm) for aluminum		
XR-Aluma-Pro™ Push-Pull Gun (air-cooled)	**#300 000** **#300 001** **#300 264**	15 ft. (4.6 m), 200 A, .030–1/16 in. (0.8–1.6 mm) for aluminum 25 ft. (7.6 m), 200 A, .030–1/16 in. (0.8–1.6 mm) for aluminum 35 ft. (10.7 m), 200 A, .030–1/16 in. (0.8–1.6 mm) for aluminum		
XR™-Pistol Push-Pull Gun (air-cooled)	**#198 127** **#198 128**	15 ft. (4.6 m), 200 A, .030–1/16 in. (0.8–1.6 mm) for aluminum 30 ft. (9 m), 200 A, .030–1/16 in. (0.8–1.6 mm) for aluminum		
XR-Aluma-Pro™ U-Groove Aluminum Drive Roll Kits	**#195 311** **#195 312** **#195 313**	.035 in. (0.9 mm) .040 in. (1.0 mm) .047 in. (1.2 mm)		
XR™-Pistol U-Groove Aluminum Drive Roll Kits	**#195 201** **#195 273** **#195 202**	.035 in. (0.9 mm) .040 in. (1.0 mm) .047 in. (1.2 mm)		
Accessories				
Dual Cylinder Rack	**#195 299**	Field installed, replaces single cylinder rack		
Protective Cover	**#195 142**			
Electrode Wire				
Shielding Gas Cylinder				
Helmet/Gloves/Scratch Brush				
Available Through Miller Service Parts				
CO_2 Regulator/Flow Gauge	**#212 492**	Required if using 100% CO_2 gas		
Power Cord Plug	**#213 380**	For 200/230 V, single-phase. NEMA-style 6-50P		
Contact Tips				
Tapered Contact Tips				
Contact Tip Adapter				
Replacement Liners				
Nozzles				
Tapered Nozzles				
Drive Rolls				

Date: **Total Quoted Price:**

Distributed by:

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